

IN THE CLAIMS

1. (Cancelled)

2. (Previously Presented) A molding method using ultrasonic vibration in which a resin material in a molten state is injected from an injection apparatus, filled into a cavity of a first mold, and cooled down to mold a product in a predetermined shape, the method comprising:

    providing a first mold comprising a fixed mold and a movable mold and having a plurality of product cavities to mold products, a runner by which the product cavities are connected to each other, and a resin pit located at a halfway part of the runner, wherein the movable mold comprises a through-hole which communicates with the resin pit and which is formed in the same direction as a forward/backward moving direction of the movable mold;

    providing a vibrator attached to an ultrasonic oscillator and inserting a tip of the vibrator into the through-hole such that the tip of the vibrator forms a bottom of the resin pit;

    injecting the resin material into the resin pit and thereby filling all of the plurality of product cavities; and

    applying ultrasonic vibration to the resin material in the resin pit at a predetermined time.

3. – 11. (Cancelled)

12. (Previously Presented) A molding machine for injecting a resin material from an injection apparatus into a cavity formed in a first mold and for compressing the resin material to mold a product in a predetermined shape, the molding machine comprising:

a first mold comprising a fixed mold and a movable mold and having a plurality of product cavities for molding products, wherein the movable mold comprises a through-hole which communicates with the resin pit and which is formed in the same direction as a forward/backward moving direction of the movable mold;

a runner connecting the product cavities to each other;

a resin pit located at a halfway part of the runner;

an injection apparatus for injecting a resin material into said resin pit, thereby filling the plurality of product cavities with resin via said runner; and

an ultrasonic oscillator for applying ultrasonic vibration to resin material in the resin pit, wherein a vibrator attached to the ultrasonic oscillator, is inserted into the through-hole such that a tip of the vibrator forms a bottom of the resin pit.

13. – 20. (Cancelled)

21. (Previously Presented) The molding machine according to claim 12, wherein a resin-holding capacity of the resin pit relative to each of the product cavities is between 10% and 40%.

22. (Previously Presented) The molding method using the ultrasonic vibration according to claim 2, wherein the predetermined time is after commencing injecting resin material to at least part of the resin pit while the resin material in the runner has a predetermined viscosity.

23. (Previously Presented) The molding method using the ultrasonic vibration according to claim 2, wherein the ultrasonic vibration is applied while a compressed state is maintained after the resin material is filled into the product cavity and compressed.

24. (Currently Amended) The molding method using the ultrasonic vibration according to claim 2, wherein the ultrasonic vibration is applied so that an amount of the resin material flowing into the product cavity from the resin pit and air gaps other than the product cavity is in a range of 0.1% by volume to 5% by volume of ~~the resin material filled into~~ the product cavity.

25. (Previously Presented) The molding method using the ultrasonic vibration according to claim 2, wherein the ultrasonic vibration is applied immediately after injecting the resin material is started and until a gate in communication with the product cavity is sealed.

26. (Previously Presented) The molding method using the ultrasonic vibration according to claim 2, wherein a nozzle of a molding machine supplying the resin material to the first mold is closed immediately after filling of the resin material is completed.

27. (Previously Presented) The molding method using the ultrasonic vibration according to claim 26, wherein the product is an optical lens.
28. (Previously Presented) The molding method using the ultrasonic vibration according to claim 27, wherein the optical lens is a spectacle lens, and the method further comprises subjecting the obtained spectacle lens to a surface treatment.
29. (Previously Presented) An optical lens manufactured by a molding method according to claim 27.
30. (Previously Presented) The molding machine according to claim 12, wherein the first mold has a sprue in communication with the runner.
31. (Previously Presented) The molding machine according to claim 12, wherein the resin pit is located at a midpoint on the runner.
32. – 34. (Cancelled)